WHAT IS CLAIMED IS:

1. A method of determining effects of a substance on an organ, comprising:

perfusing the at least one organ with a first medical fluid to preserve the at least one organ;

exposing the at least one organ to at least one test substance; and

gathering data regarding at least one of the at least one organ, the at least one test substance, and interaction between the at least one organ and the at least one test substance.

2. The method of claim 1, wherein the exposing step is carried out by perfusing the organ with a second medical fluid containing the test substance.

3. The method of claim 2, wherein the first and second medical fluids are the same.

4. The method of claim 2, wherein the first and second medical fluids are different.

5. The method of claim 1, wherein at least one of the at least one organ and an effluent from the organ is monitored by a sensor that senses characteristics of at least one of the effluent and the at least one organ.

6. The method of claim 5, further comprising generating data comprised of the sensed characteristics.

7. The method of claim 6, wherein the data can be generated and displayed in real time, stored, transmitted to a remote site, transferred to a recording medium, or relayed to a microprocessor for assessment.

8. The method of claim 2, further comprising collecting the second medical fluid that has passed through the at least one organ from an organ bath and sensing characteristics of the collected medical fluid indicative of the interaction between the at least one organ and the test substance.

9. The method of claim 2, wherein the test substance is a chemical compound.

10. The method of claim 2, wherein the test substance is at least one of natural and modified antibodies.

11. The method of claim 2, wherein the test substance is an immunotoxin.

12. The method of claim 2, wherein the second medical fluid is blood.

13. The method of claim 5, wherein the sensed characteristics relate to at least one of absorption, distribution, metabolism and excretion.

14. The method of claim 5, wherein the sensed characteristics relate to at least one of pharmacokinetics, pharmacodynamics and toxicity.

15. The method of claim 5, wherein the sensed characteristics relate to at least one of determining what the substance is doing to the at least one organ and what the at least one organ is doing to the substance.

16. A method of screening at least one organ with a bioactive agent, comprising:

determining that the at least one organ will not be transplanted;

perfusing said at least one organ with a first medical fluid to preserve the organ;

exposing the at least one organ to at least one test substance; and

gathering data regarding at least one of the at least one organ, the at least one test substance, and interaction between the at least one organ and the at least one test substance.

17. The method of claim 16, wherein the organ is not suitable for transplanting.

18. The method of claim 16, further comprising the steps of:

perfusing the at least one organ with a first medical fluid; and

sensing fluid characteristics indicative of organ viability.